## **REMARKS**

## **Introductory Comments**

Prior to this amendment, the present application included claims 1-4, 8-10, 22 and 28-43. With this amendment, Applicants cancel claims 30 and 31, and amend claims 1, 3, 9-10, 22, 29, 32, 38, 39 and 43 as indicated in the Listing of the Claims. Thus, with this amendment, claims 1-4, 8-10, 22, 28, 29 and 32-43 are pending in the present application. Examination of the application, as amended, and in view of the following remarks, is respectfully requested.

## Rejections under 35 U.S.C. § 103(a)

Claims 1-3, 8-10 and 22 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,976,082 to Wong et al. ("Wong") in view of U.S. Patent No. 5,486,999 to Mebane ("Mebane").

As it is titled, Wong discloses a "Method for Identifying At Risk Patients Diagnosed with Congestive Heart Failure." Wong discloses "a computer-implemented method for generating a model to identify at risk patients diagnosed with congestive heart failure." (Wong, col. 2:48-50). Wong only discusses use of healthcare resources with regard to congestive heart failure (CHF). Wong does not address the numerous other reasons a person would utilize healthcare resources or become a member of the highest utilizing group using healthcare services for any reason.

Mebane discloses a system of categorizing healthcare utilization into patients utilizing healthcare appropriately and patients utilizing healthcare inappropriately (Mebane, col. 1:11-14 and 46-59). Mebane describes this as:

Inappropriate utilization of health care services in the United States wastes scarce financial and medical resources. One common cause of such inappropriate utilization occurs when patients seek treatment of one physical condition, when,

in fact, their symptoms result from an obscured underlying etiology such as alcoholism or psychiatric illness. For instance, an alcoholic may continually seek treatment for physical ailments resulting from alcohol abuse, while the actual problem of alcoholism remains undiagnosed. Inappropriate utilization of medical resources under such circumstances is referred to herein as PATIENT DRIVEN CARE ("PDC").

In contrast, the appropriate utilization of health care and medical resources through treatment of ailments without obscured underlying causes is referred to herein as ILLNESS DRIVEN CARE ("IDC")

(Mebane, col. 1:17-32)

"In general, the [Mebane] invention involves performing an analysis based on several factors relating to a patient's lifestyle and health care utilization to identify inappropriate health care utilization." (Mebane, col. 3:27-30). Mebane focuses on identifying the appropriateness of the use of healthcare resources and categorizing patients based on whether their utilization of healthcare resources is for PDC (inappropriate) or IDC (appropriate). Mebane does not determine individuals that could become members of the highest cost group using healthcare services for any reason regardless of the appropriateness of the utilization.

Applicant has amended independent claim 1 to recite:

generating ... a risk level of said individual <u>becoming a member of the</u>

<u>highest utilizing group using healthcare services at a predetermined level for</u>

<u>any reason within a prospective time span;</u>

determining ... whether said distinct predictive factor is indicative of a high risk of said individual becoming a member of the highest utilizing group

using said healthcare services at said predetermined level for any reason within said prospective time span;

assigning ... a first dichotomous value ... if said determining step determines that said distinct predictive factor is indicative of said high risk of said individual becoming a member of the highest utilizing group using said healthcare services at said predetermined level for any reason within said prospective time span; and

assigning ... a second dichotomous value ... if said determining step determines that said distinct predictive factor is not indicative of said high risk of said individual becoming a member of the highest utilizing group using said healthcare services at said predetermined level for any reason within said prospective time span.

The present invention as recited in claim 1 does not look at a particular disease, such as CHF which is disclosed by Wong, nor does it look at the motive for utilizing healthcare resources, such as inappropriate and appropriate reasons which is disclosed in Mebane. In contrast, claim 1 recites "generating ... a risk level of said individual becoming a member of the highest utilizing group using said healthcare services at a predetermined level for any reason within a prospective time span." Applicants respectfully submit that neither Wong nor Mebane, either alone or in combination, disclose the invention as recited in claim 1.

For at least these reasons claim 1 is believed to be patentable over Wong in view of Mebane. Claims 2, 3, 8-10 and 22 are dependent on base claim 1. Accordingly, Applicants respectfully request that the Examiner find claims 1, 2, 3, 8-10 and 22 allowable over Wong in view of Mebane.

Claim 8 recites "determining, based upon said information from said individual, at least one intervention program for said individual in response to said probability value exceeding said predetermined threshold." However, the rejection in the Office Action discusses "risk subgroups," "risk level," and "thresholds" (see Office Action, page 8, paragraph (E)). If rejection is not withdrawn, Applicants respectfully request that the Examiner identify the correlation of the elements of claim 8 with the elements of the rejection.

Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Wong and Mebane in view of U.S. Patent No. 6,269,339 to Silver ("Silver"). As described above, Applicant has amended independent claim 1 to recite additional limitations distinguishing over Wong and Mebane. Claim 4 is dependent on base claim 1. Applicant respectfully submits that the amendments to claim 1 described above also distinguish over Silver. For at least these reasons, Applicants submit that claim 4, which is dependent on claim 1 is patentable over Wong and Mebane in view of Silver. Accordingly, Applicants respectfully request that the Examiner find claim 4 allowable.

Claim 28 was rejected under 35 U.S.C. 103(a) as being unpatentable over Wong and Mebane in view of U.S. Patent Publication No. 2001/0020229 for Lash ("Lash"). As described above, Applicant has amended independent claim 1 to recite additional limitations distinguishing over Wong and Mebane. Claim 28 is dependent on claim 10 which is dependent on base claim 1. Applicant respectfully submits that the amendments to claim 1 described above also distinguish over Lash. For at least these reasons, Applicants submit that claim 28, which is dependent on base claim 1 is patentable over Wong and Mebane in view of Lash. Accordingly, Applicants respectfully request that the Examiner find claim 28 allowable.

Claims 29-31, 34-39, 41 and 43 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Mebane and Lash.

Claim 29 has been amended to incorporate the limitations of claims 30 and 31. With this amendment, claims 30 and 31 have been cancelled. With respect to the limitation of former claim 31 regarding assigning a particular value to a predictor variable for which a question associated with the predictor variable is unanswered or answered inappropriately, the Examiner cites Mebane "col. 14 line 24 to col. 15 line 26: see the discussion of a patient having a low score but having a narcotic dependency. These patients are identified as high risk even though they have a low score. This is a form of answering incorrectly or leaving a question unanswered."

(Office Action, pages 17-18, paragraph (C)). Applicants respectfully traverse the Examiner's assertion that this section of Mebane relates to answering questions incorrectly or leaving questions unanswered.

Mebane col. 14 line 24 to col. 15 line 26 explicitly states "A score of '1' is assigned to each affirmative response and a score of '0' is assigned to each negative response." (Mebane, col. 14:35-37). However, nowhere in this section is any discussion of "questions ... unanswered or answered inappropriately" as recited in amended claim 29. The cited section of Mebane does discuss thresholds of identifying a patient as a high risk patient if X out of Y questions are answered a particular way (col. 14:40-42; col. 14:46-49; col. 14:55-59), or if information indicates a narcotic dependency problem (col. 15:9-15). However, all of this discussion is about appropriately answered questions and actions taken based upon those answers. None of this discussion discloses, teaches or suggests "assigning said first dichotomous value to any distinct predictor variable of said predetermined set of predictor variables for which said at least one of

said plurality of questions associated with said any distinct predictor variable is unanswered or answered inappropriately" as recited in amended claim 29.

For at least these reasons claim 29 is believed to be patentable over Wong in view of Mebane and Lash. Claims 34-38 are dependent on base claim 29. Accordingly, Applicants respectfully request that the Examiner find claims 29 and 34-38 allowable over Wong in view of Mebane and Lash.

In the rejection of claims 34 and 35, the Examiner "submits that it is well known in the surveying arts to use both scannable forms and IVR telephone systems to survey patients."

Applicants respectfully traverse this assertion by the Examiner, especially with regard to methods of managing the use of healthcare services, and respectfully request that the Examiner provide documentary evidence of such knowledge at the time of the invention.

The Examiner rejects independent claim 39 for the same reasons as claims 29-31, 34-36 and 37-38 (see Office Action, page 19, paragraph (H)).

Claim 39, similar to former claim 31 and amended claim 29, recites: "assigning said first dichotomous value to each said distinct predictor variable for which said at least one of said plurality of questions associated with said distinct predictor variable is unanswered or answered inappropriately." However, as discussed above with regard to claim 29, the Examiner asserts this limitation is disclosed in Mebane col. 14, line 24 to col. 15, line 26 (see Office Action, pages 17-18, paragraph (C)). Applicants respectfully traverse the Examiner's assertion that this section of Mebane relates to answering questions incorrectly or leaving questions unanswered. Mebane col. 14 line 24 to col. 15 line 26 explicitly states "A score of "1" is assigned to each affirmative response and a score of "0" is assigned to each negative response." (Mebane, col. 14:35-37). This section of Mebane does not discuss "questions ... unanswered or answered inappropriately"

as recited in amended claim 29. The cited section of Mebane does discuss thresholds of identifying a patient as a high risk patient if X out of Y are answered a particular way (col. 14:40-42; col. 14:46-49; col. 14:55-59), or if information indicates a narcotic dependency problem (col. 15:9-15). However, none of this discussion discloses, teaches or suggests "assigning said first dichotomous value to each said distinct predictor variable for which said at least one of said plurality of questions associated with said distinct predictor variable is unanswered or answered inappropriately" as recited in claim 39.

In addition, claim 39 recites "identifying said individual as said high-risk person if said individual fails to answer or inappropriately answers more than a predetermined number of said plurality of questions of said self assessment questionnaire." This limitation is not included in any of claims 29-31, 34-36 and 37-38, and no basis is provided for rejecting this limitation as unpatentable based on Wong in view of Mebane and Lash.

For at least these reasons claim 39 is believed to be patentable over Wong in view of Mebane and Lash. Claims 41 and 43 are dependent on base claim 39. Accordingly, Applicants respectfully request that the Examiner find claims 39, 41 and 43 allowable over Wong in view of Mebane and Lash.

Claim 32 was rejected under 35 U.S.C. 103(a) as being unpatentable over Wong, Mebane and Lash in view of U.S. Patent No. 5,961,332 to Joao ("Joao"). Claim 32 recites: "identifying said individual as a high-risk person if said individual fails to answer more than a predetermined number of said plurality of questions of self assessment questionnaire." In the rejection of claim 32, the Examiner cites Joao, col. 35:46 to col. 36:35 which discusses "validity checks' which may be utilized in order to determine the likelihood that the assessed individuals and/or the providers are answering the pertinent questions accurately and honestly." (Joao, col. 35:57-61).

This section of Joao discloses checks for inconsistently answered questions but does not disclose unanswered questions or "identifying said individual as a high-risk person if said individual fails to answer more than a predetermined number of said plurality of questions of self assessment questionnaire" as recited in claim 32. For at least these reasons, Applicants submit that claim 32, which is dependent on base claim 29 is patentable over Wong, Mebane and Lash in view of Joao. Accordingly, Applicants respectfully request that the Examiner find claim 32 allowable.

Claims 33 and 40 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wong, Mebane and Lash in view of Silver.

Claim 33 is dependent on base claim 29. As described above, independent claim 29 is believed to be patentable over Wong, Mebane and Lash. Applicant submits that for at least the reasons provided above, claim 29 also distinguishes over Silver. For at least these reasons, Applicants submit that claim 33, which is dependent on claim 29 is patentable over Wong, Mebane and Lash in view of Silver. Accordingly, Applicants respectfully request that the Examiner find claim 33 allowable.

Claim 40 is dependent on base claim 39. As described above, independent claim 39 is believed to be patentable over Wong, Mebane and Lash. Applicant submits that for at least the reasons provided above, claim 39 also distinguishes over Silver. For at least these reasons, Applicants submit that claim 40, which is dependent on claim 39 is patentable over Wong, Mebane and Lash in view of Silver. Accordingly, Applicants respectfully request that the Examiner find claim 40 allowable.

Applicants were unable to find any reasons for rejection of claim 42 in the Office Action.

Applicants respectfully request that the Examiner find claim 42 allowable.

## Final Remarks

Claims 1-4, 8-10, 22, 28, 29 and 32-43 are believed to be in condition for allowance. Such allowance is respectfully requested.

If necessary, please consider this a Petition for Extension of Time to effect a timely response. Please charge any additional fees or credits to the account of Bose McKinney & Evans, LLP Deposit Account No. 02-3223. In the event that there are any questions related to these amendments or to the application in general, the undersigned would appreciate the opportunity to address those questions directly in a telephone interview to expedite the prosecution of this application for all concerned.

Respectfully submitted,

BOSE McKINNEY & EVANS, LLP

Anthony P. Filomena

Reg. No. 44,108

Indianapolis, Indiana 46204 (919) 861-5092

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